

CLAIM AMENDMENTS

1. (Original) A composite material comprising colloidal silica-bonded alkaline earth silicate fibers in which any bonding agents or fillers comprise low amounts of alumina so that the composite material comprises less than 1% by weight aluminium expressed as Al_2O_3 .
2. (Previously Presented) A composite material as claimed in claim 1 in which the composite material comprises less than 0.5% by weight of aluminium expressed as Al_2O_3 .
3. (Previously Presented) A composite material as claimed in claim 2 in which the composite material comprises less than 0.1% by weight of aluminium expressed as Al_2O_3 .
4. (Original) A composite material as claimed in claim 1 in which the composite material is essentially free of aluminium.
5. (Original) A composite material as claimed in claim 1 and comprising less than 1% by weight sodium expressed as Na_2O .
6. (Original) A composite material as claimed in claim 5 and comprising less than 0.5% by weight sodium expressed as Na_2O .

7. (Original) A composite material as claimed in claim 6 and comprising less than 0.1% by weight sodium expressed as Na_2O .

8. (Original) A composite material as claimed in claim 1 in which the composite material is essentially free of sodium.

9. (Original) A composite material as claimed in claim 1 and comprising less than 0.5% by weight boron expressed as B_2O_3 .

10. (Original) A composite material as claimed in claim 9 and comprising less than 0.1% by weight boron expressed as B_2O_3 .

11. (Previously Presented) A composite material as claimed in claim 1 in which the alkaline earth silicate fibre is itself adapted for use without excessive shrinkage at temperatures in excess of 1200°C .

12. (Previously Presented) A composite material as claimed in claim 1 in which the material is obtainable by vacuum forming from a slurry containing the following ingredients in weight %:-

Alkaline earth metal silicate fibres	70-85%
Colloidal silica (30% SiO_2 by weight)	3-25%
Organic binder	1-6%
Filler	11-20%

13. (Previously Presented) A composite material as claimed in claim 12 comprising:-

Alkaline earth metal silicate fibres	70-90%
Silica binder from colloidal silica (30% SiO ₂ by weight)	1-10%
Organic binder	1-6%
Filler	11-20%

14. (Previously Presented) A composite material as claimed in claim 13 comprising:-

Alkaline earth metal silicate fibres	77.3-87.2%
Silica binder from colloidal silica (30% SiO ₂ by weight)	1.2-8.2%
Organic binder	3.3-4.7%
Filler	12.8-18%

15. (Original) A composite material as claimed in claim 1 in which the material is a paper comprising:-

Alkaline earth metal silicate fibre	90-95%
Organic binder	5-10%
Organic flocculants	<1%

16. (Original) A composite material as claimed in claim 15 in which the organic binder is an acrylic latex.

17. (Previously Presented) A composite material as claimed in claim 1 in which the material is a material obtained by vacuum forming from a slurry comprising the ingredients:

Alkaline earth metal silicate fibre	60 parts by weight
Colloidal silica (30% by weight SiO ₂)	12-14 parts by weight
Starch	2.5 parts by weight

based upon the total weight of solids added to the slurry;
and in which the colloidal silica has a pH of less than 8.

18. (Previously Presented) A composite material comprising 4-12% by weight colloidal silica, 3-6.5% starch, balance alkaline earth silicate fibre, to total 100% based on the weight of composite material.

19. (Previously Presented) A composite material as claimed in claim 18 and comprising 4-9% by weight colloidal silica, 3.5-5% starch, balance alkaline earth silicate fibre, to total 100% based on the weight of composite material.

20. (Original) A composite material as claimed in claim 18 comprising about 6% colloidal silica.

21. (Previously Presented) A composite material as claimed in claim 1 in which the material is a material obtainable by vacuum forming from the ingredients:-

“White water” component	50-80% by volume of 30% solids colloidal silica with 20-50% by volume water
Alkaline earth metal silicate fibre	0.5-4% by weight of fibre, calculated as the weight of the fibre solids per weight of white water component

and in which the colloidal silica has a pH of less than 8.

22. (Currently Amended) A composite material as claimed in claim 1 in which the material is a material obtainable by vacuum forming from the ingredients:-

“White water” component	90-100% by volume of 30% solids colloidal silica with 10-0% by volume water
Alkaline earth metal silicate fibre	2-3% by weight of fibre, calculated as the weight of the fibre solids per weight of white water component

and in which the colloidal silica has a ~~Ph~~ pH of less than 8.

23. (Previously Presented) A composite material as claimed in claim 21 and which comprises 15-30% by weight silica binder formed from colloidal silica, balance fibre.

24. (Original) A composite material as claimed in claim 17 in which the fibre is present in amounts comprising 0.5-5% by weight of the water in the slurry.

25. (Currently Amended) A composite material as claimed in claim 1 in which the material is a material obtainable by vacuum forming from the ingredients

“White water” component	65-100% by volume of 40% solids colloidal silica having a Ph pH of less than 10 with 35-0% by volume water
Alkaline earth metal silicate fibre	2-3% by weight of fibre, calculated as weight of fibre solids per weight of white water component

wherein the sodium content of the colloidal silica is below 0.1 wt%.

26. (Original) A composite material as claimed in claim 22 and which comprises 15-30% by weight colloidal silica, balance fibre.

27. (Canceled)

28. (Canceled)